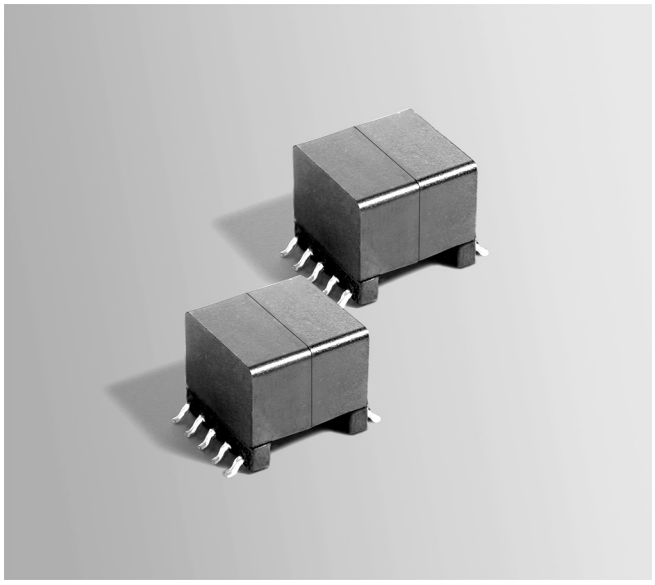
15 W Forward Mode Transformers



- Designed for two-switch forward topology operating at 250 kHz
- Five different outputs from 3.3 V to 15 V; 36 – 75 V input
- 1500 Vrms, one minute isolation from primary and aux to the secondary

Core material Ferrite

Terminations RoHS tin-silver over tin over nickel over phos bronze. Other terminations available at additional cost.

Weight 6.9 – 7.1 g

Ambient temperature –40°C to +85°C

Storage temperature Component: –40°C to +85°C. Tape and reel packaging: –40°C to +80°C

Resistance to soldering heat Max three 40 second reflows at +260°C, parts cooled to room temperature between cycles

Moisture Sensitivity Level (MSL) 1 (unlimited floor life at <30°C / 85% relative humidity)

Failures in Time (FIT) / Mean Time Between Failures (MTBF) 38 per billion hours / 26,315,789 hours, calculated per Telcordia SR-332

Packaging 175 per 13″ reel Plastic tape: 32 mm wide, 0.5 mm thick, 28 mm pocket spacing, 12.93 mm pocket depth

PCB washing Tested with pure water or alcohol only. For other solvents, see Doc787_PCB_Washing.pdf.

Part number[1]	Inductance[2] nom (µH)	DCR max (mOhms)[3] pri	sec	aux	Leakage inductance[4] max (µH)	Input voltage range (V)	Turns ratio[5] pri : sec	pri : aux	Output[6]
FCT1-33M2SL_	705	55	6.0	320	0.510	36 – 75	1 : 0.24	1 : 0.67	3.3 V, 4.6 A
FCT1-50M2SL_	705	55	13.5	320	0.425	36 – 75	1 : 0.33	1 : 0.67	5.0 V, 3.0 A
FCT1-90M2SL_	705	55	33.5	320	0.340	36 – 75	1 : 0.57	1 : 0.67	9.0 V, 1.67 A
FCT1-120M2SL_	705	55	46.5	320	0.340	36 – 75	1 : 0.71	1 : 0.67	12 V, 1.25 A
FCT1-150M2SL_	705	55	72.5	320	0.310	36 – 75	1 : 0.90	1 : 0.67	15 V, 1.0 A

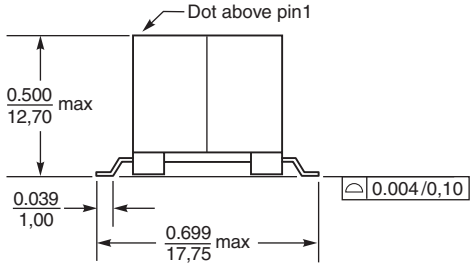
1. When ordering, please specify a **packaging** code:

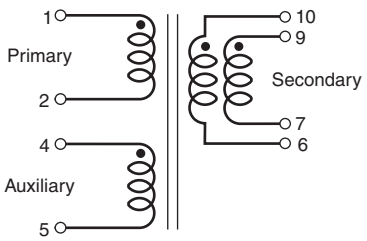
FCT1-50M2SLD

Packaging: **D** = 13″ machine ready reel. EIA-481 embossed plastic tape (175 parts per full reel).
B = Less than full reel. In tape, but not machine ready. To have a leader and trailer added ($25 charge), use code letter D instead.

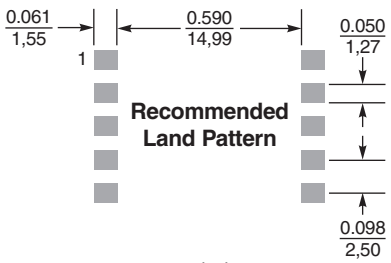
2. Inductance is measured at 250 kHz, 0.5 Vrms, 0 Adc.
3. DCR for the secondary is measured with the windings connected in parallel.
4. Leakage inductance is for the primary and is measured with the secondary shorted.
5. Turns ratio is with the secondary windings connected in parallel.
6. Output is with the secondary windings connected in parallel. Auxiliary winding output is 10 V, 20 mA.
7. Electrical specifications at 25°C.

Refer to Doc 362 “Soldering Surface Mount Components” before soldering.

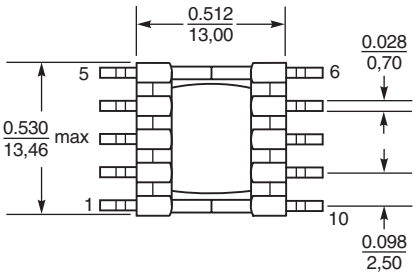




Secondary windings to be connected in parallel on PC board.



Dimensions are in inches / mm



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Document 635 Revised 02/18/09